Return on Investment Program Funding Application (FY 2003 Request)

This is an electronic template. Please enter your responses on this document. Only electronic submittals of this template will be accepted. Proposals submitted after the designated due date may not receive funding consideration.
FINAL AUDIT REQUIRED: The Enterprise Quality Assurance Office of the Information Technology Department is required to perform a final project outcome audit, after implementation, for all Pooled Technology funded projects.

IT PROJECT EVALUATION

SECTION I: PROPOSAL

Date: July 15, 2001

Agency Name: Transportation

Project Name:

Expenditure Name: Ongoing Operating Expenses

Agency Manager: Steven Gast

Agency Manager Phone Number / E-mail: Steven.Gast@DOT.state.IA.US

Executive Sponsor (Agency Director or Designee): Mark Wandro

Request For ROI Application Waiver:

Agencies are required to complete this funding application when requesting funds for any project, any IT expenditure costing over $100,000, or any non-routine IT expenditure. If you feel there is compelling reason to waive this requirement, please provide (in the box provided below) a brief description of the project or expenditure, the budget amount, and a rationale for the waiver request. Until a decision is made regarding your waiver request, it is not necessary to complete any other portion of this application. The ITD Enterprise Quality Assurance Office will convey waiver request decisions within five working days of receipt.

Explanation:

A. Project or Expenditure Rationale

Is this project or expenditure necessary for compliance with a Federal standard, initiative, or statute?   ☒ **YES** (If "YES," explain)   ☐ **NO**

Explanation: Normal, customary, and routine IT operating expenditures are necessary for the DOT to adequately function.

Is this project or expenditure required by State statute?   ☒ **YES** (If "YES," explain)   ☐ **NO**

Explanation: Normal, customary, and routine IT operating expenditures are necessary for the DOT to adequately function.

Does this project or expenditure meet a health, safety or security requirement?
☒ **YES** (If "YES," explain)   ☐ **NO**

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> **Explanation:** Normal, customary, and routine IT operating expenditures are necessary for the DOT to adequately function.

Is this project or expenditure necessary for compliance with an enterprise technology standard?
☒ **YES** (If "YES," explain)   ☐ **NO**

> **Explanation:** Normal, customary, and routine IT operating expenditures are necessary for the DOT to adequately function.

Is this project or expenditure consistent with meeting the goals and objectives of the State's strategic plans?
☒ **YES** (If "YES," explain)   ☐ **NO**

> **Explanation:** Normal, customary, and routine IT operating expenditures are necessary for the DOT to adequately function.

Is this a "research and development" project or expenditure?   ☐ **YES** (If "YES," explain)   ☒ **NO**

> **Explanation:**

B. Project or Expenditure Summary

1. Provide a pre-project or pre-expenditure (before implementation) <u>and</u> a post-project or post-expenditure (after implementation) description of the impacted system or process. In particular, note if the project or expenditure makes use of information technology in reengineering traditional government processes.

Response: The DOT will spend approximately $8,160,000 in FY03 for normal and customary IT expenditures necessary to carry out its mission. The following five broad categories and funding amounts show where the DOT will operationally allocate resources to provide services to the traveling public.

1) Data Communications - $3.15M expenditure for interstate and intrastate data communication line expenditures, infrastructure hardware maintenance, outside contractors for installation of lines, and electronic parts related to remodeling and normal replacement.

i) Interstate - $240K for AAMVAnet communications mandated by the Commercial Motor Vehicle Safety Act of 1986.

ii) Intrastate - $1,960K for both non-ICN and ICN data communications (all communication lines are engineered by the ICN). These lines allow us to connect to our garages, county courthouses, district office, etc. where we do business.

iii) Nortel Equipment Maintenance - $202K including phone support, code upgrades, over night exchange and four-hour core equipment response support services for the DOT's agency network (LAN & WAN).

iv) Contract Labor - $153K historically used for small projects related to data communications, such as wiring, cabling at DOT locations. Primarily used to hire outside vendors to lay cable as adjunct to DOT staff on large projects or to do specialized tasks such as trenching.

v) Materials & Supplies - $596K for electronic parts such as data wiring and cable, related to facility remodeling at DOT facilities and general replacement of defective parts.

2) Host Operations - $1.04M expenditure to maintain an environment capable of supporting large scale applications, storing large data sets, and accessed simultaneously by many users.

i) IBM CPU Lease, $170K for the central processing unit at the DOT (a leased IBM 9672-R25 with IBM RVA2

ii) IBM Maintenance, $191K for maintenance on host attached devices such as DASD of over 584 gigabytes, printers, communication processors and controllers.

iii) IBM Software, $675K to support commercially available, off the shelf, software programs (not covered by enterprise agreements) operating on the mainframe

3) Application Software Maintenance - $0.51M expenditure for engineering software packages core to the business of road design, construction, and maintenance

i) Bentley - $164K for support for about 500 concurrent licenses of specialized computer aided design and drafting software (Microstation, Descartes, InterPlot, etc) necessary for the creation, printing, and publishing of highway and bridge plans.

ii) Geopack - $135K for support for 135 licenses of the Bentley's GeoPack design software that facilitates the three dimensional earthwork and alignment calculations involved in roadway and site design

iii) ASHTOware - $211K for licensing fees and support for a suite of products generated by a consortium of state DOTs. The components currently used are, CES (Cost Estimation System), PES (Proposal and Estimates System), LAS (Letting and Award System), CAS (Construction Administration System), BAMS/DSS (Decision Support System), FieldManager Extended License (Construction Management Suite for Project Engineers and Inspectors), and Intranet (Web Browser Access to TRNS*PORT Information).

4) New Purchases - $3.34M expenditure for new hardware and software

i) Misc Software, $337K. Historically this has been used for purchases under $100K to improve operational efficiency through central purchases to benefit the DOT as an enterprise.

ii) IP Plan $3,000K. The FY03 Information Processing Plan would not require neither an ROI nor a waiver because it is a non-budgetary expenditure. All hardware purchases are funded through a revolving fund at the DOT and are not part of the DOT budget requests. The DOT provides ITD with a copy of the IP Plan prior to initiating any purchases. ITD reviews the plan to insure it meets adopted standards, and then authorized DOT to purchase from the plan.

5) Education & Training - $0.12M

i) $120K for continuing education of IT personnel. Courses have included XML, DB2, Java, and specialized training on back up equipment, firewalls, routers, etc..

2. Summarize the extent to which the project or expenditure improves customer service to Iowa citizens or within State government. Included would be such items as improving the quality of life, reducing the government hassle factor, providing enhanced services, improving work processes, etc.

Response: These routine IT operational expenditures support the divisions providing services directly to the traveling public.

3. Identify the main project or expenditure stakeholders and summarize the extent to which each, especially citizens, is impacted. In particular, note if the project or expenditure helps reconnect Iowans to State government.

Response: Routine IT operational expenditures directly affect all customers of DOT services. These include
Cities
Counties
Highway users, general
Information-related business
Local law enforcement enties
Media
Road Construction businesses
State agencies
State employees
Taxpayers, general
Tourists
Transportation businesses

SECTION II: PROJECT ADMINISTRATION

A. Agency Information

1**.** <u>Project Executive Sponsor Responsibilities</u>: The sponsor must have the authority to ensure that adequate resources are available for the entire project, that there is commitment and support for the project, and that the organization will achieve successful project implementation.

   Response: No response required.

2. <u>Organization Skills</u>:
   a. List the project management skills necessary for successful project implementation
   b. List the project management skills available within the agency
   c. List the source(s) of project management skills lacking within the agency
   d. Summarize relevant agency project management experience and results

> **Response:**   NA - routine operations costs

B. Project Information

1. <u>History</u>:
    a. Is this project the first part of a future, larger project? If so, please explain.
    b. Is this project a continuation of a previously begun project? If so, please explain project history, current status, and results.

> **Response:**   NA - routine operations costs

2. <u>Expectations</u>: Describe the primary purpose or reason for the project.

> **Response:**   NA - routine operations costs

3. <u>Measures</u>: Describe the criteria that will be used to determine if the project is successful.

> **Response:**   NA - routine operations costs

4. <u>Environment</u>: List the project participants (i.e. single agency, multiple agencies, State government enterprise, citizens, associations, or businesses, etc.).

> **Response:**   NA - routine operations costs

5. <u>Risk:</u> Describe the project risks which may be internal or external to State government, i.e. implementing versus not implementing project, changing technology, potential cost overruns, changing citizen demand or need, etc.

Response: NA - routine operations costs

6. <u>Security / Data Integrity / Data Accuracy / Information Privacy</u>
    a. List the security requirements of the project
    b. Describe how the security requirements will be integrated into the project and tested
    c. Describe what measures will be taken to insure data integrity, data accuracy and information privacy.

Response: NA - routine operations costs

7. <u>Project Schedule</u>
    Describe general time lines, resources, tasks, checkpoints, deliverables, responsible parties, etc.

Response: NA - routine operations costs

SECTION III: TECHNOLOGY (In written detail, describe the following)

A. Current Technology Environment
1. <u>Software (Client Side / Server Side / Midrange / Mainframe):</u>
   a. Application software
   b. Operating system software
   c. Major interfaces to other systems, both internal and external

   Response: NA - routine operations costs

2. <u>Hardware (Client Side / Server Side / Mid-range / Mainframe):</u>
   a. Platform, operating system
   b. Storage and physical environment
   c. Connectivity and bandwidth
   d. Logical and physical connectivity
   e. Major interfaces to other systems, both internal and external

   Response: NA - routine operations costs

B. Proposed Technology Environment

1. <u>Software (Client Side / Server side / Mid-range / Mainframe)</u>
   a. Application software
   b. Operating system software
   c. Major interfaces to other systems, both internal and external
   d. General parameters if specific parameters are unknown or to be determined

   Response: NA - routine operations costs

2. <u>Hardware (Client Side / Server Side / Mid-range / Mainframe)</u>
   a. Platform, operating system
   b. Storage and physical environment
   c. Connectivity and Bandwidth
   d. Logical and physical connectivity
   e. Major interfaces to other systems, both internal and external
   f. General parameters if specific parameters are unknown or to be determined

   Response: NA - routine operations costs

C. Data Elements
If the project creates a new database, provide a description of the data elements.

   Response: NA - routine operations costs

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SECTION IV: Financial Analysis

A. Budget: Enter figures and calculate (see formula below) Total Annual Prorated Cost (State Share).

$$\left[\left(\frac{Budget\ Amount}{Useful\ Life}\right) \times \%\ State\ Share\right] + \left(Annual\ Ongoing\ Cost \times \%\ State\ Share\right) = Annual\ \Pr orated\ Cost$$

Budget Line Items	Budget Amount (Annual expense)	Useful Life (Years)	% State Share	Annual Ongoing Cost (After 1st Year)	% State Share	Annual Prorated Cost
Agency Staff	$0	1	0%	$0	0%	$0
Software	$1522000	4	0%	$0	0%	$0
Hardware	$33610000	3	0%	$0	0%	$0
Training	$1200000	4	0%	$0	0%	$0
Facilities	$5960000	1	0%	$0	0%	$0
Professional Services	$3550000	4	0%	$0	0%	$0
ITD Services	$0	4	0%	$0	0%	$0
Supplies, Maint, etc.	$0	1	0%	$0	0%	$0
Other (Specify)	$22000000	1	0%	$0	0%	$0
Totals	$81540000	-------	-------	$0	------	$0

Transfer this amount to the ROI Financial Worksheet, item "D" on page 12.

IT PROJECT EVALUATION
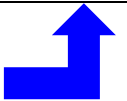
B. Funding: **Enter data or provide response as requested**

1. This is (pick one): ☐ A Pooled Technology Fund or Reengineering Fund Request
    ☒ An Agency IT Expenditure or Budget Request (General Fund, Road
    Funds, etc)
    ☐ Other – Specify: 0%

2. On a fiscal year basis, enter the estimated cost by funding source?

	FY03		FY04		FY05	
	Cost ($)	% Total Cost	Cost ($)	% Total Cost	Cost ($)	% Total Cost
State General Fund	$	%	$	%	$	%
Pooled Tech. Fund	$	%	$	%	$	%
Federal Funds	$	%	$	%	$	%
Local Gov. Funds	$	%	$	%	$	%
Grant or Private Funds	$	%	$	%	$	%
Other Funds (Specify)	$8154000	100%	$8399000	100%	$8644000	100%
Total Project Cost	$8154000	100%	$8399000	100%	$8644000	100%

If applicable, summarize prior fiscal year funding experience for the project / expenditure.

> **Response:** Routine expense critical for DOT operations

1. On a fiscal year basis, how much of the total ($ amount and %) project / expenditure cost would be <u>absorbed</u> by your agency from normal operating budgets (all funding sources)?

> **Response:** Routine expense critical for DOT operations

2. Identify, list, and quantify all <u>new annual ongoing</u> (maintenance, staffing, etc.) related costs (State $s) that will be incurred after implementation or expenditure.

> **Response:** Routine expense critical for DOT operations

C. ROI Financial Worksheet: **Respond to the following and transfer data to the ROI Financial Worksheet (see IVC11) as necessary:**

1. Annual Pre-Project Cost – Quantify all <u>actual</u> state government direct and indirect costs (personnel, support, equipment, etc.) associated with the activity, system or process <u>prior to</u> project implementation. This section should be completed only if state government <u>operations</u> costs are expected to be reduced as a result of project implementation.

> **Response:** Routine expense critical for DOT operations

2. Annual Post-Project Cost – Quantify all <u>estimated</u> State government direct and indirect costs associated with activity, system or process <u>after</u> project implementation. This section should be completed only if State government <u>operations</u> costs are expected to be reduced as a result of project implementation.

> **Response: Routine expense critical for DOT operations**

3. State Government Benefit -- Subtract the total "Annual Post-Project Cost" from the total "Annual Pre-Project Cost."   This section should be completed only if State government <u>operations</u> costs are expected to be reduced as a result of project implementation.

> **Response:**   Routine expense critical for DOT operations

4. Citizen Benefit – Quantify the estimated annual value of the project to Iowa citizens**.** This includes the "hard cost" value of avoiding expenses ("hidden taxes") related to conducting business with State government. These expenses may be of a personal or business nature. They could be related to transportation, the time expended on or waiting for the manual processing of governmental paperwork such as licenses or applications, taking time off work, mailing, or other similar expenses. As a "rule of thumb," use a value of $10 per hour for citizen time savings and $.325 per mile for travel cost savings.

> **Response:**   Routine expense critical for DOT operations

5. Opportunity Value/Risk or Loss Avoidance Benefit – Quantify the estimated annual <u>non-operations</u> benefit to State government. This could include such items as qualifying for additional matching funds, avoiding the loss of matching funds, avoiding program penalties/sanctions or interest charges, avoiding risks to health/security/safety, avoiding the consequences of not complying with State or federal laws, providing enhanced services, avoiding the consequences of not complying with enterprise technology standards, etc.

> **Response:**   Routine expense critical for DOT operations

6. Total Annual Project Benefit -- Add the values of all annual benefit categories.

> **Response:**   Routine expense critical for DOT operations

7. Total Annual Project Cost – It is necessary to <u>estimate and assign</u> a useful life figure to <u>each</u> cost identified in the project budget. Useful life is the amount of time that project related equipment, products, or services are utilized before they are updated or replaced. In general, the useful life of hardware is three (3) years and the useful life of software is four (4) years. Depending upon the nature of the expense, the useful life for other project costs will vary between one (1) and four (4) years. On an exception basis, the useful life of individual project elements or the project as a whole may exceed four (4) years. Additionally, the ROI calculation must include all <u>new</u> annual ongoing costs that are project related. Completing <u>Section IV-A, Project Budget</u> of the evaluation document will provide all the necessary information for this item.

> **Response:**   Routine expense critical for DOT operations

8.   Benefit / Cost Ratio – Divide the "Total Annual Project Benefit" by the "Total Annual Project Cost."   If the resulting figure is greater than one (1.00), then the annual project benefits exceed the annual project cost. If the resulting figure is less than one (1.00), then the annual project benefits are less than the annual project cost.

> **Response:**   Routine expense critical for DOT operations

9.   ROI -- Subtract the "Total Annual Project Cost" from the "Total Annual Project Benefit" and divide by the amount of the requested State IT project funds.

> **Response:**   Routine expense critical for DOT operations

10.   Benefits Not Readily Quantifiable -- List the project benefits which are not readily quantifiable (i.e. IT innovation, unique system application, utilization of new technology, hidden taxes, improving the quality of life, reducing the government hassle factor, meeting a strategic goal, etc.). Rate the importance of these benefits on a "1 – 10" basis, with "10" being of highest importance. Check the "Benefits Not Readily Quantifiable" box in the applicable row.

> **Response:**   Routine expense critical for DOT operations

11. ROI Financial Worksheet

Annual Pre-Project Cost - How You Perform The Function(s) Now	
FTE Cost (salary plus benefits):	$
Support Cost (i.e. office supplies, telephone, pagers, travel, etc.):	$
Other Cost (expense items other than FTEs & support costs, i.e. indirect costs if applicable, etc.):	$
A. Total Annual Pre-Project Cost:	$

Annual Post-Project Cost – How You Propose to Perform the Function(s)	
FTE Cost:	$
Support Cost (i.e. office supplies, telephone, pagers, travel, etc.):	$
Other Cost (expense items other than FTEs & support costs, i.e. indirect costs if applicable, etc.):	$
B. Total Annual Post-Project Cost:	$
State Government Benefit (= A-B):	$

Annual Benefit Summary	
State Government Benefit:	$
Citizen Benefit:	$
Opportunity Value or Risk/Loss Avoidance Benefit:	$
C. Total Annual Project Benefit:	$
D. Annual Prorated Cost (SECTION IV-A):	$
Benefit / Cost Ratio: (C / D) =	
Return On Investment (ROI): (C – D / Requested Project Funds) x 100 =	%

☒ **Benefits Not Readily Quantifiable**

Section V: ITC Project Evaluation Criteria

<div style="writing-mode: vertical">I T P R O J E C T E V A L U A T I O N</div>

Criteria and Location in Project Evaluation Document	Points
1. Is the project a statutory requirement; legal requirement; federal or state mandate; health, safety or security requirement or issue; and/or required for compliance with the enterprise technology standards? **Location: Section I-A**	**15**
2. Will the project improve customer service? **Location: Section I-B.2**	**15**
3. Does the project have a direct impact on citizens? To what extent does the project help reconnect state government with Iowans? **Location: Section I-B.3**	**10**
4. Does the project provide a sufficient tangible and/or intangible return on investment? Will it generate savings or income? **Location: Section IV-C**	**10**
5. Does the project make use of information technology and its practical application in reengineering traditional government processes consistent with the goals and objectives of the state's strategic plans? **Location: Section I-B.1**	**10**
6. Risk: What are the risks associated with the project? Such risks may include those internal and external to state government, the risk of doing a project, the risk of not doing a project, and the risks associated with changing technologies, potential cost overruns, and changing citizen demands and needs. **Location: Section II-B.5**	**10**
7. Is this funding required to continue a project that was begun prior to the year funding is being requested for and does it have proven past performance? Is the funding part of a multi-year strategy? **Location: Section II-B1, IVB2**	**10**
8. Will the project be for only one agency, multiple agencies, or the state government enterprise? **Location: Section I-B3, IIB4**	**10**
9. Has the applicant maximized their own and other resources in the project? Is alternative funding unavailable for this project? (If no other funding available, project will not be completed without Pooled Technology funding) **Location: Section IV-B.2, IV-B.3**	**5**
10. What is the credibility of the requester based on past performance on other projects? **Location: Section II-A.2.d**	**5**
Total	**100**